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APPLICATION NO.		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO.	
10/646,916		08/22/2003	George J. English	00-1-248 D1	1940	
24252	7590	12/15/2004		EXAMINER		
OSRAM S	YLVANI	IA INC	CARIASO, ALAN B			
100 ENDIC DANVERS,			ART UNIT	PAPER NUMBER		
,				2875		
				DATE MAIL ED: 12/15/2	204	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application	on No.	Applicant(s)				
		10/646,91	6	ENGLISH ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Alan Cari		2875				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the	cover sheet with the c	correspondence add	ress			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repend of the reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing departed term adjustment. See 37 CFR 1.704(b).	136(a). In no even bly within the state will apply and withe, cause the appl	ent, however, may a reply be tilutory minimum of thirty (30) day II expire SIX (6) MONTHS from lication to become ABANDONE	mely filed ys will be considered timely. the mailing date of this con ED (35 U.S.C. § 133).	nmunication.			
Status								
1)	Responsive to communication(s) filed on							
2a) <u></u>		s action is n	on-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims			- <i>(</i> )				
5)⊠ 6)⊠ 7)⊠ 8)□	<ul> <li>Claim(s) 36-64 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>Claim(s) 45-47,57-59,61 and 62 is/are allowed.</li> <li>Claim(s) 36-44,48,60 and 63 is/are rejected.</li> <li>Claim(s) 49-56 and 64 is/are objected to.</li> <li>Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
	on Papers	v.						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>22 August 2003</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E	: a)□ acce e drawing(s) b ction is require	be held in abeyance. Se ed if the drawing(s) is ob	ee 37 CFR 1.85(a). Djected to. See 37 CFF	R 1.121(d).			
Priority ι	under 35 U.S.C. § 119							
12)[ a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea See the attached detailed Office action for a list	nts have bee nts have bee ority docume au (PCT Rul	n received. n received in Applicat ents have been receiv e 17.2(a)).	tion No red in this National S	Stage			
2)	et(s)  De of References Cited (PTO-892)  De of Draftsperson's Patent Drawing Review (PTO-948)  De of Draftsperson's Patent Drawing Review (PTO-948)  De of Draftsperson's Patent (s) (PTO-1449 or PTO/SB/08)  De of No(s)/Mail Date	3)	4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal I 6) Other:		·152)			

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#### **DETAILED ACTION**

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cooling fins (claim 39) and indented wells (claim 60) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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## Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "Indented wells" of claim 60.

## Claim Objections

- 3. Claims 37, 42 and 47 are objected to because of the following informalities:
- 4. Claim 37, lines 2-3, "the vehicle lamp" is not consistent with its original terminology or not clearly identified in the preceding text of the claim(s).
- 5. Claim 42, lines 3-4, "the forward lamp axis direction" was not clearly identified in the preceding text of the claim(s).
- 6. Claim 47, line 2, "the lamp" appears to be missing a term as originally presented, namely –capsule--, as in "lamp capsule" in preceding claim 45.
- 7. Claim 49, line 2, the "a thermally conductive base" appears to redundant to the already claimed "base structure" in preceding claim 36, line 4.
- 8. Claim 62 is dependent on cancelled claim 1.
- 9. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 11. Claims 36-39 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by NISHIHASHI et al (US 5,038,255).
- 12. NISHIHASHI discloses a vehicle light source comprising: a replaceable lamp capsule (figs.8 & 9) having a support (2), a plurality of LEDS (5A,5B) mounted on the support (2), wherein the support (2) is made from material having a high thermal conductivity (col.2, lines 53-60) to conduct heat away from the plurality of LEDS (5A,5B), and wherein the support (2) includes a base structure (flange part of 2 distal from LED 5B) having a thermally conductive connection to a heat sink (24, fig.9); wherein the connection is to an attached spacially extended heat radiator (24, fig.9) forming a portion of the vehicle lamp (col.2, line 37); wherein the heat radiator (24) is a flange (2, fig.8) or cooling fin (24, fig.9); having a support (2) including formed indented wells (23, fig.8), a plurality of LEDs (5B) mounted respectively in the indented wells (23).
- 13. Claims 36-40, 43, 44 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by REISENAUER (US 6,161,910).
- 14. REISENAUER discloses a vehicle light source comprising: a replaceable lamp capsule (figs.1-4) having a support (22), a plurality of LEDS (26) mounted on the support (22), wherein the support (22) inherently is made from material having a high

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cylindrical (figs.2-4).

thermal conductivity to conduct heat away from the plurality of LEDS (26), and wherein the support (22) includes a base structure (84) having a thermally conductive connection to a heat sink (30); wherein the connection is to an attached spacially extended heat radiator (28) forming a portion of the vehicle lamp (col.1, line 6-8); wherein the heat radiator (28) is a flange (fig.2) or cooling fin (71, fig.4); wherein the connection is a thermally conductive coupling to a thermally conductive portion of a vehicle (col.4, lines 3-8); wherein the LEDs are mounted in a plurality of (radial concentric) bands extending around the support (fig.1); wherein the LEDs are arranged in a plurality of separate circuits (34,36,38,40,42,44) coupled to separate inputs (fig.5) enabling alternative light outputs (col.5); wherein the support (22) is substantially

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- 15. Claims 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by DEESE (US 5,806,965).
- 16. DEESE discloses a replaceable lamp capsule (fig.7) having a support (30,32,24, fig.2) defining an axial direction (33), a disk (30,32) forming a portion of the support, and a plurality of LEDs (26) mounted circumferentially on the disk (figs.1-3); wherein each LED (26) has a predominated LED axis of light emission, the majority of the LEDs being oriented so the respective LED axes form an angle with respect to the forward lamp axis direction of ninety or more degrees (36,38, figs.2-3).

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17. Claim 63 is rejected under 35 U.S.C. 102(e) as being anticipated by BORNER et al (US 6,234,648).

18. BORNER discloses a concave reflector (2,3,9-fig.1A, col.5, line 1-20) having an intermediate portion (2); a mounting post (5) with a first end (4) fixed to said intermediate portion (2) and extending away therefrom; and a lamp unit mounted to a second end of said mounting post (5), said lamp unit (6,7,8) comprising at least one light emitting diode (6,7,8) directing light toward said concave reflector (9).

## Allowable Subject Matter

- 19. Claims 45-47, 57-59, 61 and 62 are allowed.
- 20. Claims 49-56 and 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. BEDROSIAN et al (US 6,276,822) show plural LED module lamp support mounted in an opening in a reflector housing (figs.5-6). CAO (US 6,634,770) shows a support (401) having heat sink wells (403 or 904) receiving LED chips (402) therein. CHEN et al (US 6,580,228) show plural bands of flexible substrates around a support on which are mounted plural LEDs. CRUNK et al (US 6,254,262) show an LED lamp support that includes a heat sink or cooling fins coupled to a vehicle. VUKOSIC

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(US 5,929,788) shows a LED lamp capsule that includes an internal reflector and support of LEDs positioned to direct some of the LEDs toward the reflector surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (571) 272-2366. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Cariaso Alan nary Examiner

AC

December 11, 2004